

R E M A R K S / A R G U M E N T S

In the Office Action of March 24, 2008, the Examiner allowed claim 40, 41 and 43-45, and found claims 2, 8, 13, 19, 25 and 29-39 to be allowable if rewritten in independent form.

The Examiner objected to claims 2-11, 13-39, 41, 42, 44, and 45 for different informalities. Applicants corrected the informalities as suggested by the Examiner. Claims 3, 11, 14, and 26-28 were rejected under 35 U.S.C 112, second paragraph, as indefinite. The Examiner stated that claims 26-28, and 42 will be allowed if rewritten to overcome the 112 rejection and to include all the limitation of the base claim.

The Examiner rejected claims 1, 3, 4, 7 and 46 under 35 U.S.C 103(a) as unpatentable over Gnauck et al. (US H2075) in view of Gerstel et al. "Optical Layer Survivability..." and Han (US 2004/0213574), claims 5, 6, 9, 10 and 11 further in view of Darcie et al. (US 5907417), and claim 12, 14, 18 and 23 further in view of Akimoto (US2003/0039010). Claims 15, 16, 17, 20-22 and 24 rejected over combination of the same prior art references.

Applicants appreciate the time and consideration provided by the Examiner in reviewing this application and thanks the Examiner for allowing claims 40, 41, 43-45.

Applicants amended independent claims 1 and 12 based on the specification page 17, line 8 to 12. Claim limitation of claims 1 and 12 is that two ports of the AWG are provided at locations consonant with a wavelength difference ($\Delta\lambda$). Regarding the above underlined portion, the claim limitation device that two ports of the AWG pass respectively two optical signals with a wavelength difference ($\Delta\lambda$). In other words, two optical signals propagated through two ports of the AWG have a wavelength difference ($\Delta\lambda$).

In making these revisions care has been taken to ensure that no new matter has been added and that the claims remain supported by the specification.

The limitation of claim 1 is supported by the specification page 17, line 1 to 15. The limitation of claim 12 is supported by the specification page 29, lines 13 to 22.

In the optical wavelength division multiplexing access system of claim 1, a difference between the wavelengths λ_{d1} and λ_{u1} is defined as integer times (aFSR) the FSR of the AWG 21, and the ports W and P of the AWG 21 are provided at locations consonant with a difference $\Delta\lambda$ between the wavelengths for current use and reserve use. (See Fig. 3, and Figs 4A and 4B) According to this construction of claim 1, a dual optical fiber structure can be obtained at the multiplexing section, and the current-use system and the reserve-use system can be alternately selected, passively, by a single AWG. (See specification page 18, line 16 to page 19, line 14)

In the optical wavelength division division multiplexing access system of claim 12, as well as in the construction of claim 1, the wavelength difference $\Delta\lambda$ between the current-use system and the reserve-use system is designated in accordance with the locations of the ports of the AWG 22. (See Fig. 7, and Figs 8A and 8B). According to this construction of claim 12, since the downstream AWG 22d and the upstream AWG 22u are provided independently, the difference between the wavelengths of the downstream optical signal and the upstream optical signal need not be set as an aFSR, and an arbitrary difference can be designated. Thus, switching between the current-use system and the reserve-use system can be passively performed by using two AWGs, with the dual optical fiber strands being provided for the multiplexing section. (See specification page 29, line 13 to page 30, line 5)

If an optical wavelength division multiplexing access system of Gnauck is combined with two sets of transceiver/transponder for path protection cited in Gerstel and setting a wavelength difference $\Delta\lambda$ between the current-use system and the reserve-use system cited in Han, the construction of claim 1 can not be simply achieved. In the present invention of claim 1, by defining a wavelength difference between the current-use and the reserve-use as the FSR of the AWG

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and positioning between two ports of AWG, switching between the current-use system and the reserve system can be passively performed by using one AWG.

If an optical wavelength division multiplexing access system of Gnauck is combined with two sets of transceiver/transponder for path protection cited in Gerstel and two AWGs used for upstream and downstream cited in Akimoto, the construction of claim 12 can not be simply achieved. In the present invention of claim 12, by positioning between two ports of each AWGs, switching between the current-use system and the reserve-use system can be passively performed by using two AWGs.

As has been discussed above, even if references Gnauck, Gerstel, Han, Darcie and Akimoto are simply combined, the present invention cannot be obvious from such combination.

Applicants respectfully submit that all pending claims as amended in this response are allowable, and the application is now in condition for allowance, which allowance is earnestly solicited.

The Commissioner is hereby authorized to charge any additional fees which may be required in this application under 37 C.F.R. §§1.16-1.17 during its entire pendency, or credit any overpayment, to Deposit Account No. 06-1135. Should no proper payment be enclosed herewith, as by a check being in the wrong amount, unsigned, post-dated, other-wise improper or informal or even entirely missing, the Commissioner is authorized to charge the unpaid amount to Deposit Account No. 06-1135.

Respectfully Submitted,



James P. Krueger
Registration No. 35,234

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FITCH, EVEN, TABIN & FLANNERY
120 South LaSalle Street, Suite 1600
Chicago, Illinois 60603-3406
Telephone: (312) 577-7000
Facsimile: (312) 577-7007